M. A. R. 57 (Rule 116)

Measurement Book

No. B

First and final bill

Serial No. .....

564743

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency ..... M.S. Venkatesh. Class-I Contractor.

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Name of work :- Modified Estimate For the Works of Improvements to Drain and Asphalting to Medarahalli Area & Chikkasandra Area in ward No. 12 Shettyhalli Sub Division (2-works) Package No. DZ 2017-18-(02) 1. Improvement to Roads and asphalting to Medarahalli area, Shettyhalli main road via railway gate to Medarahalli main road and Chikkasandra area, Bonemill main road in ward No. 12 Shettyhalli Sub Division) Abstract of Bill Name of Agency :- M.S Venkatesh Est cost : Rs. 250.00 Lakhs						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Job Code No: 012-18-000014 and 012-18-000018 Work Order No: EE/DD/WO/302/2018-19 Dated: 02-02-19						
	Item No: 1) Removing R.S Slab of Drain and Stacking (page No. 25, I no. 5.32 of KPWD S.R 2016-17)					0.00 sqm	
					Of RS	73.59	0.00
	Item No: 2) Earth work execution by manual means in Ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification						

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M. A. R. 57 (Rule 116)
Measurement Book

No. B

Serial No. .....

564744

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	MORTH / Chapter-3 (P-141/19.1)					335838 cum	
						at Rs 97.32	326831.70
	Item no: 3) MSR 123 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller. including filling in depression occuring during rolling including cost of all labours, HOM of machinery complete as per specification, (MORTH / Chapter 3)						
						800 QTY	1504.80 sqm
						at Rs	5.93 8923.46

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
			UPTO	12 5% QTV		376.20 SQM	
					@ Rs	5.93	2230.87
			ABOVE 12 5% QTV			5829.80 SQM	
					@ Rs	7.12	41508.18
	Item NO: 4) KSRRB M300-55. Construction of subgrade and earthen shoulders with approved material gravel / Murrum with all Lifts & Leads, transporting to site spreading, grading, to required slope and compacted to meet requirement of Table No. 300-2 Complete as per specification (including cost of earth watering charges and compaction by vibratory rollers) MORTH Specification No. 305					0.00 SQM	
					@ Rs	392.85	0.00

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M. A. R. 57 (Rule 116)
Measurement Book

No. B

564745

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item no: 5) KSIRRB MoRTH-61. Construction of granular sub base grading -V as sub base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/ basalt material, mixing in a mechanical mix plant at OMC, carriage of mix material to work site, spreading in uniform layer with mortar graders on prepared surface and compacting with Vibratory with power roller to achive the 98% proctor density, Complete as per specification Clause 401 of morth V revision (Page No.153, I.No.20.5)					1156.62 sqm	
						at Rs 1731.66	2002872.59

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item no: 6) providing, laying, spreading, compacting Crushed Stone aggregate of granite/trap/basalt to wet mix Macadam specification including pre mixing the material with water at OMC in mechanical mix plant carriage of mix method of tipper to site laying in uniform layers with paver in subbase/base Course on the wall Prepared surface and compacting with vibratory rollers to achive the desired density Complete as per month specification No. 4006.2.4 with all lead and lifts and as per direction of the Engineer-in-Charge (Item No: 20.18, Page No: 157 of KPWD S.I 2016-17)						
			BOQ QTY			11447.92	cum
				abstr		1979.72	9866476.16
			upto	1251. QTY		325.56	cum

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M. A. R. 57 (Rule 116)
Measurement Book

No. B

564746

Serial No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
					at Rs	1979.72	644517.64
	Item no. 7) KSRRB.MS00-6, providing and applying Co. prime coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM, WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specification MORTH specification No. 502				BOQ QTY	7643.60	Sqm
					at Rs	30.86	235881.50
					UPTO 12th QTY	1910.90	Sqm
					at Rs:	30.86	58970.37

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
		ABOVE 125% QTY				10882.30	sqm
						@ Rs: 40.35	439025
	Item NO: 8) KSR 1213.500-2. cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of Machineries complete as per specifications						
		BOQ QTY				13262.25	sqm
		@ Rs				3.56	47213.61
		UPTO 125% QTY				3315.56	sqm
		@ Rs				3.56	11803.39
		ABOVE 125% QTY				3863.99	sqm
		@ Rs				5.93	22913.46

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M. A. R. 57 (Rule 116)
Measurement Book

No. B

Serial No. .....

Name of Work ..... From..... To..... 564747

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO: 9) KSRRB-500-7. Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared bituminous surfaces at 0.5 kg per 10 sqm, heating, bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, hire of machineries complete as per specifications, MORTH Chapter-5					20444.80 sqm	
						at RS 13.06	266969.91
	Item NO: 10) KSRRB 500-11 providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base/binding						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Course including loading of aggregates with F.E loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tippers to paver and laying mixed materials with paver finisher to the required level grade, rolling by power roller to achieve the desired density, bituexcluding cost of primer / tack coat including load, lift and cost of all materials, labour, HOM of machineries complete as per specification using 40/60 TPH capacity H.M.P with mechanical paver Gr-II (50mm to 75mm) with 4.33% VG-30 Bitumen						
				BOQ QTY		833.60	cum
				at RS		6210.95	5177447.92
				UP TO 125% QTY		188.49	cum
				of RS		6210.95	1170701.97

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M. A. R. 57 (Rule 116)
Measurement Book

No. B

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Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
	2	3	4	5	6	7	8
	Item no:-11) providing and laying bituminous concrete 40mm thick with hot mix plant using cracked aggregate of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification Clause No. 500.9 complete in all respects complete as per specification. using 40/60 TPH capacity H.M.P with mechanical power broom (30mm to 45mm) with 6% VG-30 Bitumen MORTH specification No. 509 CSI.No. 21.22.6						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	page 164)			BOQ QTY		726.18 Cum	
				at RS		15283.48	11098553.9
				upto 125% QTY		91.49 Cum	
				at RS		15283.48	1398285.51
	Item no:-12) Add plastic to Bituminous Concrete						
	8% of Bitumen			BOQ QTY		8190.83 kg	
				at RS		30.23	247608.79
				upto 125% QTY		1032.51 kg	
				at RS		30.23	31212.78
	Item no:- 13) Road marking with Hot Thermoplastic Compound with reflectorising glass beads on bituminous surface :- providing and laying of hot applied thermoplastic compound					Applied	

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M. A. R. 57 (Rule 116)
Measurement Book

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of commencement of work .....

564749

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Number	Length	Breadth	Depth		
2	3	4	5	6	7	8
2.5mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of substrate applied glass beads as per IRC 35. The finished surface to be level, uniform and free from blowholes and holes, complete as per specifications: MORTH Specification No 803 page no - 181, It-24.15 of kPWD S.R. 2016-17					987.00	Cum
				at Rs	607.68	599780.16
Item no 1-14) KSRRB M800-35, Providing and fixing of road stud 100x100 mm, die-Nos cast in aluminium, resistance to corrosive effect of salt and grit, fitted with lense						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	reflectors, installed in concrete or asphaltic surface by drilling, hole 30mm up to a depth of 60mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS: 873 part 4: 1973 complete as per Specifications					0.00 Nos	
						at Rs 402.35 0.00	
	Item no: 15) Refixing 13.5 Slab of Drain and pointing in Cm (1:3) (Page no. 25., I. No. 5.33 of KPWD S.R 2016-17)					0.00 SqM	
						at Rs 3.56 0.00	
	Item no: 16) providing Granite slabs of selected quality, roughly dressed and fixed in cement morter (1:6) including fixing curing etc						

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M. A. R. 57 (Rule 116)
Measurement Book

No. B

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e of Contractor of nature of Agency .....
of commencement of work .....

564750

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Number	Length	Breadth	Depth		
2	3	4	5	6	7	8
Complete (Page No. 25, I No. 5.31 of KPWD S.R 2016-17)					0.00	59m
					At Rs 745.36	0.00
Item no: 17) Lead charges for conveying the Excavated earth including loading and unloading up to 10kms as per directions					3358.32 Cum	
					At Rs 118.69	398599.00
Extra Item no:-18) Stone Dust/Grit. 4.75mm to 0.075mm IS 383 RRB M100-1 Loading and Unloading of Stone Boulder) Stone aggregates/Sand/Quarries/Moorum KPWD SR 2016-17						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Page No. 140					455.94	cum
				Ot RS		1334.68	608534.00
				Grand Total		:	27707143.
	Certified that the work done satisfactorily						
	Certified that the debris remove from the work spot						
	ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸನಪುರ ವಲಯ ಬೃಹತ್ ಬೆಂಗಳೂರು ಪಾಲಿಕೆ ಎಸ್ ಎಂ. ರಸ್ತೆ ರಸ್ತೆ ಬೆಂಗಳೂರು						

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M. A. R. 57 (Rule 116)
Measurement Book

No. B

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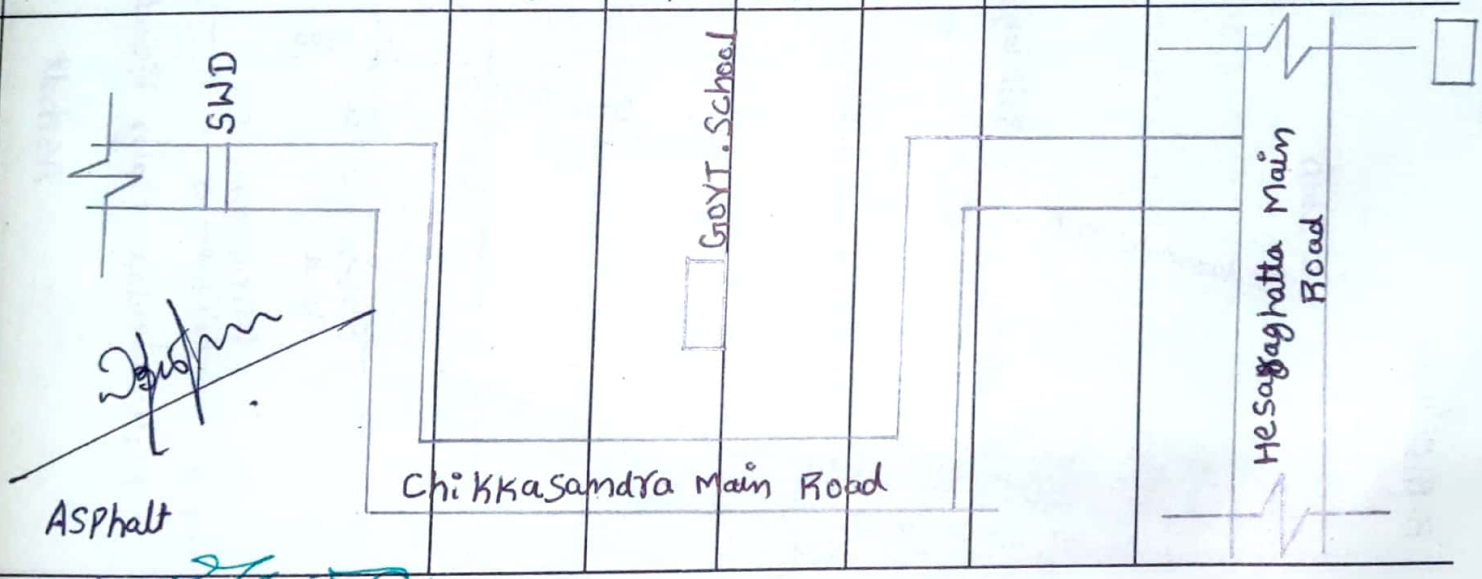
ame of Contractor of nature of Agency .....
ate of commencement of work .....

564751

ate	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	2	Number 3	Length 4	Breadth 5	Depth 6	7	8



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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೆಬ್ಬಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು.

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